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DEFENSE NUCLEAR FACILITIES SAFETY BOARD

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July 20,2000

The Honorable Madelyn R Creedon “-
Deputy Administrator for Defense Programs
Department of Energy
1000 Independence Avenue, SW
Washington, DC 20585-0104

Dear Ms. Creedon:

In a letter dated May 2,2000, the Defense Nuclear Facilities Safety Board (Board) requested an evaluation of significant unanalyzed fire hazards associated with the W76 Program at the Pantex **Plant**, along with recommended potential compensatory measures. The Board requested a response within 4 weeks. The response requires input from personnel at Los Alamos National Laboratory (**LANL**), but this evaluation has understandably been **affected** by the Cerro Grande fire. As a **result**, the Department of Energy (DOE) has asked to delay the report and briefing requested in the Board’s letter of May 2,2000. As yet unresolved is the concern over the potential energetic reaction of canned sub-assemblies(**CSAs**) in the **fires** postulated for this operation and its potential detrimental **effects**. This concern is heightened when coupled with the Board’s **observation**, also contained in the aforementioned letter, that the postulated fires could be more severe than anticipated.

The Board is concerned that crucial safety **information** available from the Y-12 Plant was never assimilated into the Weapon Safety Specification (**WSS**), Hazard Analysis Report (HAR), or Activity-Based Controls Document (**ABCD**). None of these safety-related documents considers the CSA in detail. Also, it does not appear that the CSA issue is being addressed effectively for weapon systems other than the W76. The enclosed classified issue paper prepared **by** the Board’s staff discusses additional potential problems associated with **fire**-induced heating of **CSAs**.

When separated from the enclosure, this document is unclassified.

The Board's staff has had numerous conversations on these matters with responsible LANL personnel. It appears the W76 CSA issue is being addressed, and the adequacy of the Pantex fire hazard analyses is being reviewed. Initial results of the LANL review appear to be consistent with the results of the Y-12 analyses and the conclusions of the Board's staff. LANL personnel are also planning to meet with Lockheed Martin Energy Systems at the Y-12 Plant and to review the CSA data. The staff has already discussed these data with the appropriate personnel at LANL.

The Board notes that the nuclear explosive safety study and the readiness assessment for the W76 Disassembly and Inspection Program have been postponed and that DOE **agrees** that this issue must be resolved prior to declaring readiness to proceed with these fictions. Based on these changes, the Board accepts DOE's proposal to delay providing the report and briefing, and requests that DOE evaluate the concerns in **this** letter and enclosed staff issue report and factor them into its response.

Sincerely,



John T. Conway
Chairman

c: Mr. David E. Beck
Mr. Richard F. Glass
Mr. Mark B. **Whitaker**, Jr. (without enclosure)

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